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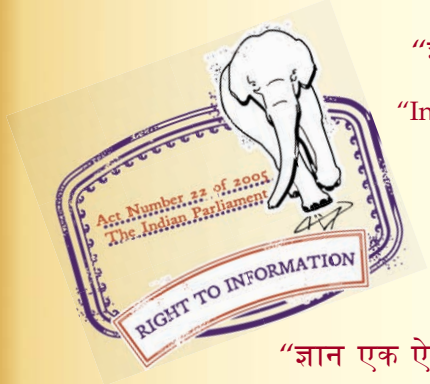

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SPECIFICATION FOR ELECTRICAL RELAYS FOR POWER SYSTEM PROTECTION

PART 0 GENERAL INTRODUCTION AND LIST OF PARTS

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PART 0 GENERAL INTRODUCTION AND LIST OF PARTS

(First Revision)

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(*Continued on page* 2)

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SPECIFICATION FOR ELECTRICAL RELAYS FOR POWER SYSTEM PROTECTION

PART 0 GENERAL INTRODUCTION AND LIST OF PARTS

(First Revision)

0. FOREWORD

0.1 This Indian Standard (Part 0) (First Revision) was adopted by the Indian Standards Institution on 15 December 1986, after the draft finalized by the Relays Sectional Committee had been approved by the Electrotechnical Division Council.

0.2 Indian Standard on electrical relays for power system protection was first published in 1965. Since then, there have been considerable changes in the concept in the field of protection relays. In the meantime, a series of standards on electrical relays has been brought out at international level. This revision is being brought out, in a series of parts, to take into account the latest developments and to align with the international practice, to the extent considered appropriate.

0.3 This standard (Part 0) is not complete by itself. It provides general information to help in understanding the format of new series. The requirements of individual types of relays are covered in appropriate part/section of this series (*see* **5** for more details).

0.4 In preparing this standard, assistance has been derived from the following:

IEC Pub 255 (various parts) Electrical relays. International Electrotechnical Commission.

BS 142 : Part 0 : 1982 Electrical protection relays: Part 0 General introduction and list of parts.

1. SCOPE

1.1 This standard (Part 0) covers general introduction and common information pertaining to the series of standards on electrical protection relays. It also lists the parts/sections in this series and provides guidance for understanding the format used in this series.

2. GENERAL INTRODUCTION

2.1 This series of standards is intended to collect together all the requirements pertinent to electrical relays for power system protection, both all-or-nothing type relays and measuring type relays. It caters both for the general requirements of principal types and the particular requirements of specialized types of protection relays.

2.2 This series is being published in various parts and sections. This format has been chosen to facilitate future revisions or amendments and additions to take account of development at international level in this area. It is also felt that this format will help the user to select the parts/sections of this series relevant to his particular requirements.

2.3 In this series, as far as possible, text of international publications (*see* **0.4**) has been retained so far as the national conditions permit. At places, supplementary matter and requirements particular to this country have been added.

2.4 For certain requirements commonly applicable to all relays (including relays other than protection relays), separate series of standards is being prepared. Reference to these standards has been made in relevant parts of this series, covering the overlapping areas and the additional requirements.

2.5 Reference may also be required to IS : 1885 (Part 9) - 1986* for complete understanding of this series.

3. CLASSIFICATION

3.1 In line with the international practice, various parts/sections in this series are classified on a hierarchical basis as given below:

First level	:	General standards
Second level	:	Generic standards relating wholly or partly to a family of relays
Third level	:	Standards applicable to wholly or partly to a particular group (sub-family) of relays
Fourth level	:	Particular requirements or specifications relating to a specific type (or pattern) of relay

*Electrotechnical vocabulary : Part 9 Electrical relays (*first revision*).

Some parts of the series are designated first level documents. Other parts are designated lower level documents, that is, second, third or fourth level. Normally, the requirements of a type of relay are considered complete if fourth level standard on the subject has been brought out.

4. EFFECT ON OTHER STANDARDS

4.1 This series of standards will collectively form the revision of IS : 3231-1965*. The question of withdrawing IS : 3231-1965* will be examined appropriately after the relevant parts/sections pertaining to the requirements of different types of protection relays covered in this standard become available. Also, since the impulse withstand test and high frequency disturbance tests now form separate parts of this series, the question of withdrawing IS : 8686-1977† will be considered on publication of this series.

5. LIST OF PARTS AND SECTIONS

5.1 The list of other parts/sections (*see* **2.2**) comprising the series, along with their classification on hierarchical basis in accordance with **3.1**, is given below:

Part/Section No.	*Title*	*Classification*
Part 1	General requirements	
Section 1	Contact performance	First level
Section 2	Insulation tests	
Section 3	High frequency disturbance test for static relays	
Part 2	Requirements for principal families	
Section 1	All-or-nothing relays	Second level
Section 2	General requirements for measuring relays	
Section 3	General requirements for thermal relays	
Part 3	Requirements for particular group of relays	
Section 1	Non-specified time or independent specified time measuring relays	Third level
Section 2	Dependent specified time measuring relays	
Section 3	Biased (percentage) differential relays	
Section 4	Directional relays and power relays	
Section 5	Impedance measuring relays	

NOTE — Under Part 3, Section 1 and 2 relate to single input energizing quantity relays whereas Section 3 to 5 relate to multi-input energizing quantity relays.

5.2 It is intended to bring out further parts/sections of this series as early as possible after publication of future international texts in the field together with other supplementary sections, where necessary.

*Specification for electrical relays for power system protection.
†Specification for static protective relays.

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